

Collaboration Models and Computational Models

Human Process Support for Collaboration:

Possible Application Focus (Decision Making, Training, Job Definitions)

- ***Distributed cognition.***

- Criteria for Distribution (According to capabilities and roles of collaborators).
- Properties of collaborators (Sense making, Trustworthiness, Capabilities, Roles, Capacity to override rules).

- ***Good team composition.***

- A function of collaborator properties.
- Neutral understanding.
- Models of the others.

- ***Definitions of progress and collaboration.***

- Movement of ideas.
- Avoidance of blunders.
- Avoids limits of tools.

Strategies for engaging computation:

- ***Scenarios.***
- ***Computational processes that accommodate processes.***
- ***Meta analysis of projects.***
 - Problem identification, etc.
 - Observation of actual practices.
 - Impact and probability of success.
- ***Computational models.***
 - Survey of available models.
 - Performance specs for ideal models.
 - Search for implicit information structures.
 - Support for indirect communication.

Theoretical Inquiry:

- ***Situational comprehension.***
- ***Definitions and automated search.***
- ***Constructivist approach.***
 - Individual.
 - Group.
- ***Distributed cognition.***
 - Definition.
 - Performance specifications for collaboration.
- ***Shared knowledge.***
 - Make privately held knowledge explicit.
 - Cognitive linkage of individuals ideas.
 - Inherent dangers.
 - Inappropriate authority and uncertainty.
 - Suppression of relevant information.
 - Technology masks.
 - Avoidance of group think.
 - Differences and disagreements.
- ***Facilitator.***
 - Overcome time and space limitations.
 - Overcome social and psychological limits.
 - Permit convergent and divergent thinking.